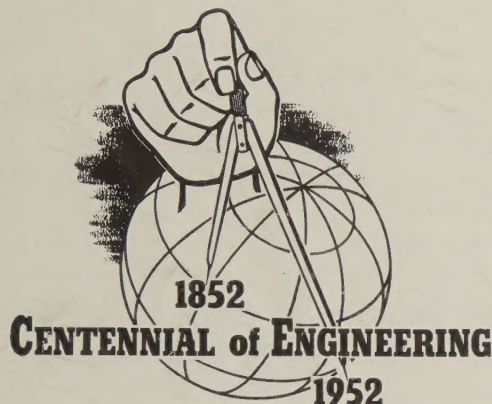




CENTENNIAL OF ENGINEERING - -

LAST CALL



N. S. P. E. - I. S. P. E. CENTENNIAL DINNER MEETING

The N.S.P.E.—I.S.P.E. Centennial Dinner Meeting will be held on September 5, next, at 7:00 p.m. (D.S.T.) in the Grand Ball Room of the Sherman Hotel in Chicago. The tickets will cost \$6.00 per person.

Eric Johnston, Chairman of the International Advisory Committee on Point Four Program, will be the speaker of the evening. Mr. Johnston is a figure of national importance. He is Past President of the United States Chamber of Commerce and was for a period the so-called Czar of the Movie Industry. Anyone who has heard Mr. Johnston over the air knows that he is a dynamic speaker. His subject for the N.S.P.E. dinner meeting has not yet been announced; however, it will no doubt deal with his present interest, the Point Four Program. Lighter entertainment will also be provided for the dinner.

This dinner is N.S.P.E.'s part in the Centennial of Engineering and should be given whatever support is possible by every member of National. A number of I.S.P.E. Chapters are planning to have representatives from among their membership attend in a group. No doubt the Secretary or Representative of your Chapter has tickets for the dinner, available. If not, they may be obtained by writing to Mr. George L. DeMent, Department of Subways and Superhighways, Room 1940, 20 North Wacker Drive, Chicago 6, Illinois.

Mr. De Ment is Chairman of the N.S.P.E. Centennial Program Committee in Chicago. Other members of the committee are C. A. Arents, John Dolio, George E.

(Continued on page 3)

PRESIDENT'S MESSAGE

The American people are accustomed to rapid technological change. Our entire civilization is geared to an ever increasing tempo, and we have come to look upon scientific developments as the natural resultant of forces aimed at specific end results. In general, we accept new products and methods in terms of their economic effect upon our way of life, and we purchase these things with an eye to bettering our standards of living or our standards of work. We purchase machines for our manufacturing operations to increase our production or to reduce operating costs. We purchase automobiles as much for comfort and personal satisfaction as we do for a means of transportation. We buy television sets primarily for our amusement—and we accept all of these things as normal everyday events with rarely a thought of the secondary results.

Chicago has recently struggled through two political conventions. These have been the most important political conventions in the history of our country, for John Q. Public has had an opportunity to attend these conventions. In fact, John Q. Public has had a better opportunity to attend these conventions than did the delegates who sat in the auditorium, for the television cameras were all-seeing, and the microphones were monitored at nearly every conceivable point where something of importance took place. The television audience could see better, hear better and understand what occurred better than those representing their states in that great milling and noisy crowd.

Paradoxically, we discover that the high priced toy which was purchased for entertainment purposes has become an instrument of education. It is a secondary function—but one which we cannot overlook, for it has far reaching influence. For the first time in history, millions of Americans have watched and heard the operation of choosing Presidential candidates. Millions of Americans have learned at first hand how political factions within the party structure struggle with every tool at their command to control the destinies of their fellow men. Televising the conventions has aroused America to our political future as has no other means of communication in the past. Delegates from some areas received telegrams from hometown constituents demanding that

SUBSCRIPTION RATES

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they "get busy and stop loafing" when the cameras swung their direction and revealed them out for coffee or paying no attention to the speaker of the moment. Political opinions have swerved from one direction to another merely because some candidates' actions have been caught by the candid television camera. Our instrument of entertainment has become a powerful instrument in molding public opinion—and so we find that our technological developments are often much more important in their secondary roles than in their primary function.

We trust that the televised conventions have awakened the people of America to the political shambles which exist across our Nation. We trust that the people of America will exert their franchise at the polls in November, and that they will throw out the corruption and moral weakness that have insidiously crept into our public offices. And finally, we trust that the American people will pause to consider that our great American Nation was made great under a system of free enterprise and a "government of the people, by the people, for the people", and that the free enterprise which has produced their television sets cannot exist under any other system of government.

A. D. SPICER, *President, I.S.P.E.*

VOX SECRETARII

P. E. ROBERTS, *Assistant Secretary*

Unity

The Convocation programs of the Centennial of Engineering begin on Wednesday, September 3rd, and continue through Friday, September 12th. Among the twelve Sections of the assembly there are many specific subjects of particular interest to the members of the Illinois Society. Leaders in both industry and education will discuss nearly one hundred phases of engineering; in fact, seldom does such a large number of distinguished speakers appear on any program.

World-wide interest in the Centennial Convocation has attracted the attention of engineers from Australia to Erin and from all parts of the United States. It is expected that 40,000 engineers will attend the Centennial during the Convocation, September 3rd through September 12th. A list of the foreign visitors who will be in Chicago next month is in the Secretary's office and is available for inspection by any member who is interested in examining it.

The Centennial of Engineering will do much toward promoting unity in the profession. The exchange of ideas, the discussion of technical and non-technical subjects by leading authorities and the intermingling of men from all parts of the world will bring a better understanding of mutual problems and also will acquaint the public with the history and the development of all aspects of engineering. The Adam to Atom musical show which is now playing in the Museum of Science and Industry theater is entertaining and educational and will hold the interest of both children and adults.

The material side of unity will be advanced by expo-

sitions, convocations and conventions but unity will become an accomplishment only with a proper mental attitude. Unity like happiness is a state of mind. When engineers and engineering societies are willing to lay aside their petty differences, animosities, and personal discriminations they will be ready for a unified profession.

Unity is concord, harmony, uniformity, undividedness, and joint tenancy. Disunity is discord, disagreement, dissension, and misunderstanding.

That a unified program is desirable is undisputed but at the present time are professional engineers willing to make the minor sacrifices necessary to attain it? The points of view of the various societies and associations are sometimes vastly different but the objectives of all are the same—a better profession for all engineers and a more sympathetic attitude from the public. The methods of some groups are more direct than those of others, some are ultra-conservative and some are liberal to the extreme, but does it matter so long as all are driving for the same end—a solidly unified profession?

Unity of the engineering profession is a state of mind. Unity will come only when all engineers want it enough to make the necessary sacrifices to obtain it.

MESSAGE FROM THE JUNIOR REPRESENTATIVES

JAMES L. MILLS

One hundred years ago engineers throughout the country met and founded the American Society of Civil Engineers. How short a century really is when you stop to consider what the achievements and accomplishments of engineers have been.

In recognition of A. S. C. E. and the whole engineering profession, September 3rd to September 10th has been set aside for the Centennial of Engineering. Engineers from all over the world will gather in Chicago to be part of the greatest conclave professional engineers have ever attempted.

We, as younger engineers, should make every effort to attend part of this Centennial and see for ourselves what engineers have done in the past 100 years and what will be expected of us in the next one hundred.

Our own society, together with N. S. P. E., will meet September 5th followed by an evening banquet at the Sherman Hotel. Your Chapter Representative will be glad to sell you a ticket.

I would like to urge as many of you as possible to attend this meeting, see the many displays and pageants, hear many of the famous speakers, and take part in some of the technical group meetings. This Centennial should be a milestone in our efforts for unity within our profession.

SOMMERSCHIELD SPEAKS BEFORE DuKANE

Mr. H. C. Sommerschild, representative from the Chicago Chapter, recently presented a paper on Prestressed Concrete before the DuKane Chapter.

William T. Hooper, Jr., Consulting Engineer of Waukegan, Is Author of Article in July Issue

Through an error, the article, "Shortcomings of Our Engineering Education," appearing on page 5 of the July issue of the *Illinois Engineer* and written by William T. Hooper, Jr., of Waukegan, was credited to another name. The Editor regrets that this mistake occurred.

HONORARY MEMBERSHIP AWARDED POSTHUMOUSLY

A tellers committee appointed by President Spicer has completed its work and announces that upon counting the ballots, Mr. Loran D. Gayton is awarded Honorary Membership posthumously.

The committee consisted of Wyndham J. Roberts, chairman, C. Dale Greffe and Ben F. Muirheid.

N. S. P. E. REGIONAL MEETING IN LA CROSSE, WIS.

Mr. E. W. Seeger, Vice-President, N. S. P. E. Central Area, has planned a regional meeting to be held in La-Crosse, Wis., on September 12th and 13th, next. This will be a joint meeting with the Wisconsin State Society. Convention headquarters will be at the Stoddard Hotel.

The following subjects are on the agenda: (1) A discussion of how to implement the recent research survey report, "How to Improve Engineering-Management Communications," (2) Dues, (3) Common state operating problems.

All N. S. P. E. members are cordially invited to attend.

NEW NAME AND ORGANIZATION FOR KEWANEE BOILER CO.

The Kewanee Boiler Co. is now the Kewanee-Ross Corporation, a Division of American Radiator and Standard Sanitary Corporation. W. B. Russel is president of the merged corporation and C. E. Branson has been made vice-president of product engineering. The merger took place on July 1, 1952.

ITEMS FROM LAKE COUNTY CHAPTER

Through the efforts of C. A. Anderson, Lake County Chapter has been obtaining some excellent publicity for the Centennial of Engineering in their local paper, the *Waukegan News-Sun*.

Mr. William G. Weber, member of Lake County Chapter, I. S. P. E., was recently honored for forty years of service with the Illinois Bell Telephone Co. at a luncheon held at the Swedish Glee Club, Waukegan.

The Lake County Chapter will resume its regular meetings in September.

COST OF LIVING INDEX

The correction factor to be applied to the I. S. P. E. Schedule of Minimum Fees and Salaries was 191.1 for June, 1952. The factor is based upon the U. S. Department of Labor's most recent Consumer Price Index.

CENTENNIAL—LAST CALL

(Continued from page 1)

Fraser, R. E. Gibbs, A. L. Ralph Sanders, Harold Sommerschild and C. A. Walls.

While this dinner is an N.S.P.E. project, the fact that the affair is being held in Chicago makes it primarily an Illinois Society responsibility. It is hoped that the I.S.P.E. membership will give it the fullest support possible.

CENTENNIAL PROCLAMATION—GOVERNOR STEVENSON

Governor Adlai E. Stevenson recently issued a proclamation urging public participation in the Centennial of Engineering celebration which will be held in Chicago, which began July 12 and continues through September 15.

The proclamation follows:

"Whereas, A great Centennial of Engineering, opening July 12 and continuing until September 15, 1952, is to be held in Chicago, and

"Whereas, This Centennial commemorates the one hundredth anniversary of the founding of the first national society of civilian engineers in the United States --The American Society of Civil Engineers, and

"Whereas, Thousands of scientists and engineers from all parts of the United States, and many engineers and officials from Europe and Latin America are to attend this distinguished two-months meeting, and sixty-one societies will participate in its activities,

"Now, therefore, I, Adlai E. Stevenson, Governor of the State of Illinois, do hereby in official proclamation direct the attention of the people of Chicago and of Illinois to this notable Centennial of Engineering, and request them to do their part in making the occasion a memorable success."

UNIVERSITY OF ILLINOIS CIVIL ENGINEERING ALUMNI TO HOLD CENTENNIAL DINNER

The Alumni of the Civil Engineering Department, University of Illinois, will hold a dinner during Engineering Centennial Week in Chicago. The dinner will take place in the Upper Tower Room of the Conrad Hilton Hotel (formerly the Stevens) on Tuesday, September 9, next at 6:30 p.m., daylight saving time. President George D. Stoddard of the University will speak at the dinner.

The committee of alumni which has been making the arrangements for the dinner is made up of the following: Theodore W. Schroeder, Chicago attorney, class of '25, Chairman; Virgil E. Gunlock, Commissioner of Subways and Superhighways, City of Chicago, Class of '27; Harry E. Schlenz, Vice President, Pacific Flush Tank Co., Chicago, Class of '27. W. A. Oliver is contact member from the Civil Engineering Department.

Notice of the dinner is being included in the annual canvass which the Department makes of all of its graduates. A return envelope has been provided for making dinner reservations. All alumni are cordially invited

to attend. Because they estimated that the full capacity of the room in which the dinner is to be held would be needed for alumni, the Committee decided that wives would not be included.

Reservations can be made by sending \$6.00 (check or money order) to cover the cost of the dinner including tax and gratuity, to Mr. Theodore W. Schroeder, Schroeder and Simpson, One N. La Salle Street, Suite 2141, Chicago 2, Illinois.

G. B. RICHARDSON CIVIL DEFENSE CHIEF

Mr. George B. Richardson, member N. S. P. E. and of Central Illinois Chapter, has been appointed chief of the rescue section of the state civil defense organization. The function of the rescue section is to remove bombing victims from destroyed buildings, basements and debris. Mr. Richardson is chief civil engineer for the A. E. Staley Manufacturing Co. of Decatur.

FROM CAPITAL CHAPTER CHATTER

Objectives—1952

1. Two hundred twenty-five members this year.
2. One-half of the membership in attendance at meetings.
3. At least one interesting newspaper article each week.
4. For the city of Springfield to adopt an overall city plan.
5. Adjourn our business meetings not later than 10 p. m.
6. Seventy-five per cent of our membership belonging to outside groups interested in civic affairs.
7. At least one definite task for each committee to accomplish during the year.

L. C. AUBY TAKES NEW POST

Mr. L. C. Auby, Operating Supervisor with the Illinois Power Company's Central Division, has been promoted to take charge of all of the company's electric transmission and distribution facilities with headquarters in Decatur.

Mr. Auby is Past President of the Champaign County Chapter and has otherwise been active in chapter affairs. He was honored at a chapter luncheon on July 10th, last.

The chapter regrets the loss of Mr. Auby from its membership, but wishes him every success in his new surroundings.

Cyril R. Drew

The Illinois Society of Professional Engineers notes with regret the sudden death of Mr. Cyril R. Drew, president of the Lake County Chapter, on July 16, 1952. A more detailed obituary will appear in a later issue.

I hold every man a debtor to his profession;
from the which as men of course do seek to re-
ceive countenance and profit, so ought they of
duty to endeavor themselves by way of amends
to be a help and ornament thereunto.

Sir Francis Bacon

UTILIZATION OF MANPOWER

Red Tape Is Preventing the Government from Fully Utilizing its Manpower

As simple a problem as approving payment of a job of repairing a condensate return line which has been frozen, takes one man three days to look up the details for fear of being "hanged" by the red tape.

In 1930 the Orders and Regulations, embodying the Operating Rules for the Corps of Engineers, was a small book, eight inches high, six inches wide, of approximately 200 pages. In 1950 the O.-R. comprises about 10 volumes of loose leaf folders, containing a total of some 1500 pages. The 1930 operating rules were written in positive statement form; but the rules of 1950 have been clouded with if's, and's, and but's.

During the twenty-odd years that the writer has been more or less intimately connected with the workings of the Federal Government, only three instances have been noted by him where employees were actually trying to steal from the Government. As an observation, it can be stated that 99 per cent of the personnel, noted over the years, would not knowingly cheat or steal from the Government or anyone else. However, over the past 20 years, the rules and regulations have been changed and revised greatly on the assumption that the major portion of the U. S. citizenry are dishonest; and the consequent red tape is so sticky that it prevents dealing in the most efficient manner on the part of the Federal Agencies with the suppliers and contractors.

In the early 30's, an office performing three million dollars worth of work could be manned, and adequately so, by about 20 employees. Today, the equivalent work—about 7.5 million dollars worth—requires nearly 100 employees to perform it. This great increase in personnel is almost directly chargeable to the increased red tape.

Our newspapers are full of the cries that the moral fibre of the American people is breaking down. Why wouldn't it? when all the people doing business for and with the government, are so tied down with restrictions that no one can know all of the requirements. Think of the immense number of persons involved: 3,000,000 Federal employees and approximately 25,000,000 suppliers' and contractors' personnel, almost all of whom are entirely dependent on Government orders. The snares and traps have been as carefully hidden as an Indian rabbit snare is hidden by leaves.

An honest, hard working employee and a conscientious, industrious contractor trying to complete a job in good faith, will break some law or become frustrated by the snarls of delaying red tape. The only purpose served by the damnable snarls is to give employment to some thousands of clerks to wind up the spools. The obsolete files of Government red tape would form a continuous line stretching outward into God's firmament to a point beyond the view of the 200-inch telescope. The trees cut down to make the paper for these unnecessary costly files of nothing, would cover the denuded slopes

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of Oregon, and leave enough over to plant wind breaks from Oklahoma to Canada.

When so many restrictions and blocks are placed in the road of an efficiently operating contractor that he must cut corners to keep the job going ahead on schedule, is it any wonder that the respect for Federal law is decreasing? If the Government would do away with the presently cumbersome laws that say "you shall not" and would change to laws that say "you can do," this disrespect for law would practically disappear.

In addition to providing a more healthy attitude toward our Government, the many obvious ways in which red tape could be eliminated would save many millions of dollars by reducing the clerical help, filing space, franked mail and tons of paper and envelopes now devoted to this useless purpose. Too, it would reduce the amount of red ink needed to show the deficit so familiar to us as presented in Government monetary reports.

—N. M. Prof. Engineer

Whatever is worth doing at all, is worth doing well.

—Chesterfield

It is said that Henry Kaiser, oft called the miracle ship builder, has a creed to which he attributes a large share of his success. His creed is entitled, "There's Always a Way," and runs briefly as follows:

When you're in trouble, do something—even if it may be wrong.

If you can't go under, go over; if you can't go through, go around.

If you can't go right, go left; if you can't get an angle, take two plates and make it.

If you haven't got the right material, go get it; if you can't find it, make substitutions; if you can't substitute, improvise; if you can't improvise, make an innovation.

Above all, get the job done.

POSTOFFICES ON WHEELS

Farmers can mail packages, buy stamps, get money orders, buy savings bonds, make postal savings deposits, and other postal services direct from the rural mail carrier's car. Some 32,500 of these rural carriers travel 1,495,000 miles a day to provide efficient service to some 60 million rural residents.

Engineering Societies Personnel Service, Inc.

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84 East Randolph Street, Chicago 1, Ill. STate 2-2748

These items are from information furnished by the Engineering Societies Personnel Service, Inc., Chicago. This SERVICE is operated on a co-operative non-profit basis by the Illinois Society of Professional Engineers, and the national societies of Civil, Electrical, Mechanical and Mining and Metallurgical Engineers. Apply to ESPS, Chicago and the key number indicated. Prepared ENGINEERS AVAILABLE advertisements limited to 40 words, with typed resumé attached may be submitted to ESPS Chicago by members of the Illinois Society of Professional Engineers at no charge.

If placed in a position as a result of an Engineers Available or Position Available advertisement, applicants agree to pay the established placement fee. These rates are available on request and are sufficient to maintain an effective non-profit personnel service. A weekly bulletin of positions open is available to subscribers. Apply E.S.P.S., Chicago.

OVER THE MANAGER'S DESK July 1952

Many employers seem to think that the shortage of engineers is a temporary condition which will be overcome in about a year. The truth of the matter is that this condition will be with us until 1960 and all forecasts indicate it will be much worse before it gets better.

Many engineers think this is a good time to take advantage of the situation. Actually this is not the case. It is true that this period does and will offer an engineer the opportunity to better himself as long as he stays within reason as to salary requirements compared to what he can offer in knowledge and experience.

If in doubt either as an employer or as an employee, contact E.S.P.S. and let us give you the benefit of our experience. B.H.A.

MEN AVAILABLE

Chief Engr., M.E., 43. Three yrs. and nine mos. Project Engr., making power plant surveys, write reports and specifications, evaluate bids, make recommendations for purchase, take charge of design of plant, equipment layout, piping and client relations. Ten and one-half yrs. District Manager, ass't field erector and operator, layout of stoker installations, estimator, manage subsidiary company in development, design and application of grinding machine. Time and motion study, abrasive devel. Six yrs. and three mos. Foundation Inspector, preliminary surveys, survey party leader, layout of foundations, wall tracks. \$10,000. Midwest. 373-PE

Estimator, C.E., 38. Eight and one-half yrs., Project Engineer, steel design, estimating, field erection trouble shooting on power house construction, field erection contacts, concrete design, structural steel detailing, layout, field engineer on steel erection, customer contacts, and some concrete design. Three yrs. Surveyor, heading field parties of 2 to 4 men, instrument man, survey plats, maps, legal descriptions. Chicago. \$7,000. 374-PE

General Manager, M.E., 30. Seven yrs. and nine mos. Design Engr., research, development, testing of high speed coal pulverizer, design of special machinery and production dept. To produce special parts for coal pulverizer, field work. Supervisor of gauge and fixture design, hydraulic valve, dies, trim-

mers, presses, tool, maintenance parts, design on forging equipment. \$7,500. Midwest. 375-PE

Chief Engineer, M.S., M.E., 33. Three and one-half yrs. Project Engineer, originate designs, test apparatus and experiments for enrg. equip. To improve operation of equip., by redesign and experimentation, devised new methods of production to reduce cost of fabrication. Five yrs., Development Engr., developed new method for improving surface finish of cold drawn steel, method of production that materially reduces cost of production, experiment and design new products, developed test apparatus that detected many flaws in product. One yr. and one-half Mech. Engr., to design and supervise design of original equip. \$8,000. Chicago. 376-PE

Factory Mgr. or Supt., 52. One yr. President, general management, estimating, planning, scheduling. Nine yrs. General Supt., administration staff, coordination between engr. depts. and shops, directing and planning work for mach. shop, supervision of the constr. of radar prototypes, jigs, fixtures, dies and gears. Production and development of Antennas and associated electronic equip., and supervised the manuf. of special textile machines and the development of special textile apparatus. Two yrs. instructing mach. shop practice. \$9,000. U.S. and Foreign. 377-PE

POSITIONS AVAILABLE

Product Development, M.E. or E.E., up to 40. 3 yrs. plus exp. in engineering and administration work in area of precision or intricate mechanisms. Should be creative thinker. Duties: research and development to improve products. Both engineering and administrative duties. For manufacturers of dental, electric and aircraft equipment. Employer may negotiate the fee. Salary: \$15,000-\$20,000. Location: Upper New York State. R-8989

Material Handling Engineer. M.E. or I.E. Age: up to 35. 2 plus years exp. in material handling on cased goods. Knowledge of lift truck operations and plant layout. Duties: set up systems for use of lift trucks. For a brewery. Salary: \$500-\$600 per month. Employer will pay fee. Location: Wisconsin. T-8993

Draftsman. Age: up to 35. 2 years plus exp. in drafting air conditioning, heating and ventilating. Knowledge of duct work. Duties: drafting of mechanical phases of

retail stores. For a chain of retail stores. Salary: \$375 to \$425/month. Employer will pay fee. Location: Chicago. R-8992

Design—Bridges. E.E. 5 plus years exp. in steel and concrete design. Knowledge of bridge design, particularly steel desirable. Duties: designing and drawing up own work. For a consultant. Salary \$500-\$525 per month. Employer will pay fee. Location: Chicago. R-8991

Designer. C.E. Able to do board work on roads, paving, curbs and gutters, storm drains and railroads. Duties: Design on the board on above named type of projects. For a consulting firm. Salary: \$400-\$700 per month. Employer may negotiate fee. Location: Chicago. R-8990

Recent Graduate—Mechanical. Age: about 23. Duties: working in office as sales trainee for manufacturer of aluminum sheet products. Must have good personality. Salary to \$350. Location: Chicago. R-8988

Instructor. Mechanical Drawing M.S. Degree. Age to 35. Duties: teaching engineering drawing first year—but should be able to handle other courses in mechanical engineering. Salary to \$3800 for school terms. Location: No. Michigan. T-8987

Design Engineer. Prefer B.S. Degree. Age: 23-40. 3 yrs. exp. product development in electro-mechanical field. Knowledge of electronics or acoustics useful. Duties: development of electrically controlled mechanisms and electro-mech. components for mass production including preparation of enrg. information which will permit smooth mfg. flow and insure good field performance of products. Some electronic and acoustic work would be available were applicant so trained. For a manufacturer of automatic phonographs and allied equipment. Salary: \$5000-\$8500. Employer will negotiate fee. Travel on rare occasions. T-8986(b)

Inspection Engineer. B.S.E.E. (preferred). 28-35 years of age. 3 years exp. in manufacturing of electrical products, associated with inspection, processing or at testing. Supervisory experience desirable. Knowledge of electronics manufacturing. Duties: administrative work consisting of organizing and supervising quality control and inspection covering fabrication and assembly including design and maintenance of electrical and mechanical testing equipment. For mfg. of coin operated phonograph (juke-box). Company neg. fee. Salary: \$5000-\$7200. Location: Michigan. T-8986(a)